

reached. By charging vehicles in the linear region between points 212 and 214, more effective use of the charging facilities is made than by charging vehicles in the range between points 214 and 216. This method of allocating vehicles with the highest charge, however, may be modified, as previously described, in order to provide vehicles for long trip use (i.e. vehicles charged between 214 and 216 on the state of charge graph). In cases where vehicles for long trips are needed the vehicles with the second highest charge could be allocated for use in order to preserve the most highly charged vehicle for the long trip user. In cases where a greater demand for long trip vehicles was present, the vehicle with the second highest charge might also be reserved. The allocation of vehicles can be modified by statistical or simulated vehicle use in order to make the most efficient use of charging facilities, while at the same time attempting to accommodate the need for vehicles with high state of charge for long trips.

Replace the paragraph on page 16, between line 8 and line 23, with:

Vehicles may be relocated from one port facility to another in a variety of manners. For example, an attendant may simply drive the vehicle from one facility to the other. However, the attendant performing the relocation would then be displaced from his original location. Accordingly, two attendants may drive two vehicles from one port to the next, leave one vehicle at the destination port and then both attendants may return to their original port in the other one of the two vehicles. However, that process requires two

attendants to transport a vehicle between facilities. Accordingly, in a preferred embodiment, some or all of the vehicles within the fleet are provided with towing bar connectors and each port facility is provided with towing bars for connecting two vehicles together. In this manner, one vehicle may be readily connected to another and towed to a remote port facility by a single attendant. The attendant may then disconnect the connected vehicles, leave one of the vehicles for the user and return to the original port facility with the other one of the two vehicles. Alternatively a secondary vehicle, for example a motor scooter, may be secured to the second vehicle. The motor scooter can, upon delivery of the vehicles, be used to transport both the attendant and the towing bar equipment thus allowing the two connected vehicles to remain at the destination port while the attendant and the towing equipment depart.

Replace the paragraph on page 18, between line 3 and line 11, with:

If the identification information received from the central facility matches the identification information (card key or token) entered by the user, the user is allowed access to the vehicle, as shown in step 74, and a counter stops timing a preset time period, such as five minutes, as shown in step 76. In preferred embodiments, the vehicle subsystem employs an electronic door lock that is controlled to selectively unlock the vehicle, step 78, to allow access to the vehicle interior. In addition, counters within the vehicle subsystem are set and started for counting the number attempts of entering a personal identification number PIN,

step 80, and for timing a preset time period by which a correct PIN must be entered, such as 200 seconds, step 82.

Replace the paragraph between page 18, line 24, and page 19, line 23, with:

In one preferred embodiment both the user's identification data and PIN are read from a user's identification card and communicated to the vehicle to be allocated to the particular user. As soon as the user's identification data and PIN are communicated to the vehicle to be allocated to the particular user, an authorized user may drive the vehicle on a trip without any further communication between the vehicle and the central facility. Upon use of the proper identification card and entry of a correct PIN within the vehicle, the vehicle is ready to drive. The identification card reader 242 may be located on a window as shown Fig. 13. The PIN entry is accomplished by means of an input and display device, which may be mounted in a center console within the vehicle as shown in Fig. 13. In another preferred embodiment, the determination of whether the entered PIN is correct or not is made at the central facility, for additional security. In this case the valid PIN is not sent to the vehicle, instead the user in the vehicle enters a PIN which is then sent to the central facility for validity determination. If the PIN is valid, the central facility sends a notification of valid PIN to the vehicle. In particular, the central facility 12 preferably includes or operates with a database, table, algorithm, number encoded on the user's identification card, or the like which associates each user's identification information (card key or token)

with the user's personal identification number PIN. Accordingly, upon receiving the requesting user's identification information, the central facility 12 obtains that user's PIN, for example, by comparing the identification information with corresponding data base entries and reading PIN information associated in a database with the identification information. Furthermore, when the user enters a PIN in the user interface and display device in the vehicle, steps 86 or 100, the vehicle subsystem transmits the entered PIN to the central facility. The central facility then compares the PIN received from the vehicle subsystem with the PIN retrieved from the database, table, algorithm, user's identification card, or the like. If a sufficient match exists, the user is considered to have entered a correct PIN. The central facility may then send an enabling command to the vehicle, acknowledging that a correct PIN has been entered at the vehicle and the vehicle may be driven. The correct PIN can be maintained in the vehicle subsystem 18 for later identification of the user and enabling of the vehicle, even if the vehicle were not in communication with the central facility.

Replace the paragraph between page 26, line 14, and page 27, line 13, with:

In preferred embodiments, the system 10 in Fig. 1 includes a plurality of port facility 14 located in geographically remote locations relative to each other, for example, at locations convenient for a large number of potential users, such as near train or bus stations, campuses, office parks, shopping areas or the like. Two examples of

vehicle distribution port facility 14 are shown in Figs. 6 and 8. In the example embodiments of Figs. 6 and 8, the vehicle distribution port facility 14 includes parking spaces 156 for parking a plurality of vehicles 16. In addition, the distribution port facility 14 includes a computer subsystem 158 typically located at a kiosk 14 to facilitate user interaction. Fig. 7 shows a generalized block diagram representation of the computer subsystem 158, which includes a computer 160, a display and user interface device 162, and a communications interface 164 for communication with the central facility 12. The communications interface 164 may be, for example, a satellite, radio frequency RF or other wireless link, in which case, the interface 164 would include a transmitter/receiver. In a preferred embodiment of the invention, the interface 164 between the central office facility and the subsystem 158 may comprise a hard wired connection, such as through computers linked to the Internet. Such a preferred embodiment is illustrated in Fig. 14. In Fig. 14, the user's interface to the system is a kiosk containing a computer, display screen, and one or more input devices such as a card reader and a keyboard and touch screen. A kiosk computer 250 serves as a web client connected to the Internet. The system control computer 254 serves several functions, for example as the registration web-server 256 process computer, it also provides a monitoring and control process 264 for the system. The registration web-server 256 serves the kiosk computer 250 web clients. The registration web-server 256 also allows access to the registration web-server 256 by other computers connected to the Internet. Having a web connection not only simplifies the connection of

the kiosk computer(s) 250 to the system by allowing the kiosk web clients 250 to be located anywhere there is a ready connection to the Internet, it allows access to the vehicle sharing system from other Internet connected computers. This is valuable for users of the system because they may access the system remotely, for example to make reservations for shared vehicles, to determine if vehicles are available at a port, to determine how long a wait there is for a vehicle, to apply for membership in the vehicle sharing system or for other reasons.

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Replace the paragraph on page 28, between line 3 and line 25, with:

Fig. 15 is a flow diagram of the process when a user seeks a shared vehicle. As the user approaches the kiosk the system is idling, block 270. The user then swipes their identification card at the kiosk card reader as in block 272. The card read by the kiosk card reader is the same card as used at the vehicle to gain entry, and is also the same card used to gain access to the kiosk area. The kiosk computer then accesses the registration web server in block 274. When communication has been established between the registration web server 256 and the kiosk web client computer 250, block 276 is executed. In block 276 user identification information, which has been obtained from the identification card, along with a kiosk ID identifying the transmitting kiosk, is sent to the registration web server. Next in block 278 the registration web server 256 compares the user ID received from the kiosk web client computer 250 to the active user list to see if the user is an authorized user. If the

user ID is invalid, block 282, the user is told, in block 284, that their user ID is not valid and the system returns to the idle state in block 270. If the User ID is valid, block 280, the registration web server 256 collects the user request information in block 284. The user request information consists of information such as vehicle destination, estimated time of the trip, and estimated distance of the trip. When the user information has been collected, the registration web server 256 queries the shared system database, in block 286, in order to satisfy the request. In block 288 the

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registration web server 256 selects an available vehicle from the database 258 to satisfy the user request. In block 290 the user is asked if they accept or decline the offered vehicle. If the user declines the vehicle, block 294, the registration web server 256 disconnects as seen in block 296. If the user accepts the vehicle, in block 292, the registration web server 256 stores the trip request data in the shared vehicle database in block 298. Finally in block 300 a computer control process polls the vehicle request database and processes the request.

Replace the paragraph between page 28, line 26, and page 29, line 7, with:

The computer subsystem 158 is preferably disposed in a well lit and highly visible location and, more preferably, is also housed within a building or enclosed structure 166 (as shown in Fig. 6), to which access is controlled for user security. Access may be controlled by an attendant stationed at the port facility 14 or by a standard lock and key system, wherein a key to the door 168 is issued to each user.

However, in preferred embodiments, the door lock is controlled by a card key entry system and each user is issued a card key comprising a card on which magnetic, optical or other machine-readable data is recorded. In such systems, the enclosed structure 166 is provided with an electronic door lock and a card reader 172 disposed in a user accessible location outside of the structure 166, for example, adjacent the door 168.

Replace the paragraph on page 29, between line 8 and line 17, with:

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To gain entry to the structure 166, a user must swipe or insert the user's card key past or in the card reader 172, to allow data from the card to be read and communicated to the computer 160. The computer 160 is programmed to process the user ID and, provided user ID is in the database of currently valid users, controls the electronic door lock to unlock the door 168 and allow the user to enter the structure 166. For example, the data may comprise a user identification code or an expiration date code and the computer 160 may be programmed to compare user identification code with a database of valid user identification codes or compare the expiration date code with the current date. Thus, the computer 160 may be programmed to unlock the door 168, only if the user identification code is valid or an expiration date has not passed.